

noted that the intensity of the infection to different host species as well as their distribution in certain regions are variable. The cause for the varied range of pathogenecity and their irregular distribution may be due to local climatic effect on parasitism. It has been observed that the humid zone is rich in parasites whereas dry zone has less parsities. Similarly the industrial belt exhibits reduction of parasitic activity perhaps due to the gases and fumes covering the area. These effects may have bearings on the physiological processes of the germinating seeds on the host species and thereby control the parasitic activity. It has been also recorded that gymnosperms or monocotyledon taxon do not have this parasitic infection.

The observations are summarised in Table 1.

DEPT. OF BOTANY,  
ASUTOSH COLLEGE,  
CALCUTTA 700 026.

PABITRANANDA GANGULY

HABRA, 24 PARGANAS,  
WEST BENGAL,  
March 14, 1975.

DULAL PAL

### 31. NOTES ON SOME INTERESTING CYPERACEAE OF GUJARAT

During the course of a critical study of the Cyperaceae of Gujarat, we came across a few cyperaceous plants which are either little known or unrecorded for Gujarat. Where the plant was recorded by Cooke (Fl. Pres. Bombay Vol. III. 1958), the name adopted by him is given in parenthesis.

#### **Cyperus polystachyos** Rottb.

(*Cyperus odoratus* Linn.)

This plant is listed by Cooke (p. 372) from Gujarat on the authority of Woodrow who collected it from Surat. Blatter (*Journ. Bombay nat. Hist Soc.* 19:162. 1909) has also reported it from Kutch. It is included by Sabnis (*Bull. bot. Surv. India* 4:195. 1962) in his Cyperaceae of Gujarat.

Since the reports of Cooke and Blatter, it has not been reported to occur in Gujarat. One specimen (*G.L. Shah* 10477) from Baroda, kept in the Blatter Herbarium, Bombay as an unidentified *Cyperus*, collected in December 1954, is of this species. The present report thus confirms its occurrence in Gujarat but this herbarium specimen consists of two distinct taxa, which, following Kukenthal (Pfreich. 101:367-370. n. 328. 1936), are varieties *polystachyos* and *laxiflorus*.

## KEY TO VARIETIES

Inflorescence globose, compact head;  
 spikelets 0.7-1.0 × 0.08-0.1 cm ..... *C. polystachyos*  
 var. *polystachyos*

Inflorescence lax umbel; spikelets  
 2.0-2.5 × 0.15-0.2 cm ..... *C. polystachyos*  
 var. *laxiflorus*

**Cyperus procerus** Rottb.

Collected from margins of Nalsarovar in North Gujarat. Very rare.  
 (MHP 62, January, 1970).

**Cyperus diaphanus** Schrad. ex Roem. & Schult.

(*C. latespicatus* Clke.).

Very rare, found among grasses. (Coteshwar, MHP 73; Hampheshwar YYK 2655; Sadhli YYK 2232).

**Fimbristylis alboviridis** Clke.

This is a rare species growing among grasses along with *F. bisumbellata* Bub. and *F. dichotoma* (Linn.) Vahl. Its present known distribution is Lunawada (GLS 14693), Dediapada (VKS 1287) and Dangs (HS 19198). All the three species mentioned above, together with *F. podocarpa*, look very similar and are likely to be confused. The following key will be useful to separate them.

Nut prominently striate with 6-8 vertical trabeculate ribs:

Annual; glumes one-nerved, glabrous, obtuse;

nuts 0.1-0.15 cm long ..... *F. bisumbellata*

Perennial; glumes 3-nerved; mucronate, hairy, at least

on margins; nuts 0.06-0.08 cm long ..... *F. dichotoma*

Nut faintly striate with many vertical trabeculate ribs:

Glumes cymbiform, much convex on back;

nut 8-10 ribbed, not verrucose .... *F. alboviridis*

Glumes more or less flat; nut distantly verrucose in upper

half, 17-20 ribbed ..... *F. podocarpa*

Incidentally *F. podocarpa* Nees is only recorded from Dangs (Shah & Suryanarayana in *Journ. Bombay nat. Hist. Soc.* 66:412-414. 1969) for which the correct name is *Fimbristylis dichotoma* (Linn.) Vahl var. *pluristriata* (Clke.) Napper in *Kew Bull.* 25(3):437. 1971.

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